10/530074
Rec'd PCT/PTO 01 APR 2005
PCT/CA2003/001507

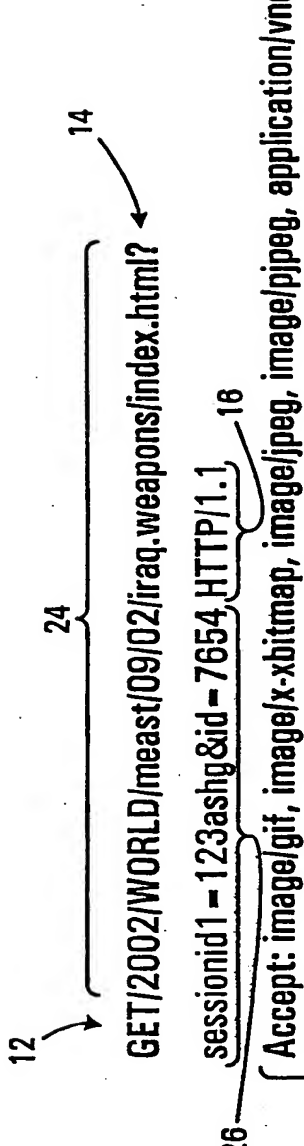

FIG. 1A

10/530074
Rec'd PCT/PTO 01 APR 2005
PCT/CA2003/001507

FIG. 1B

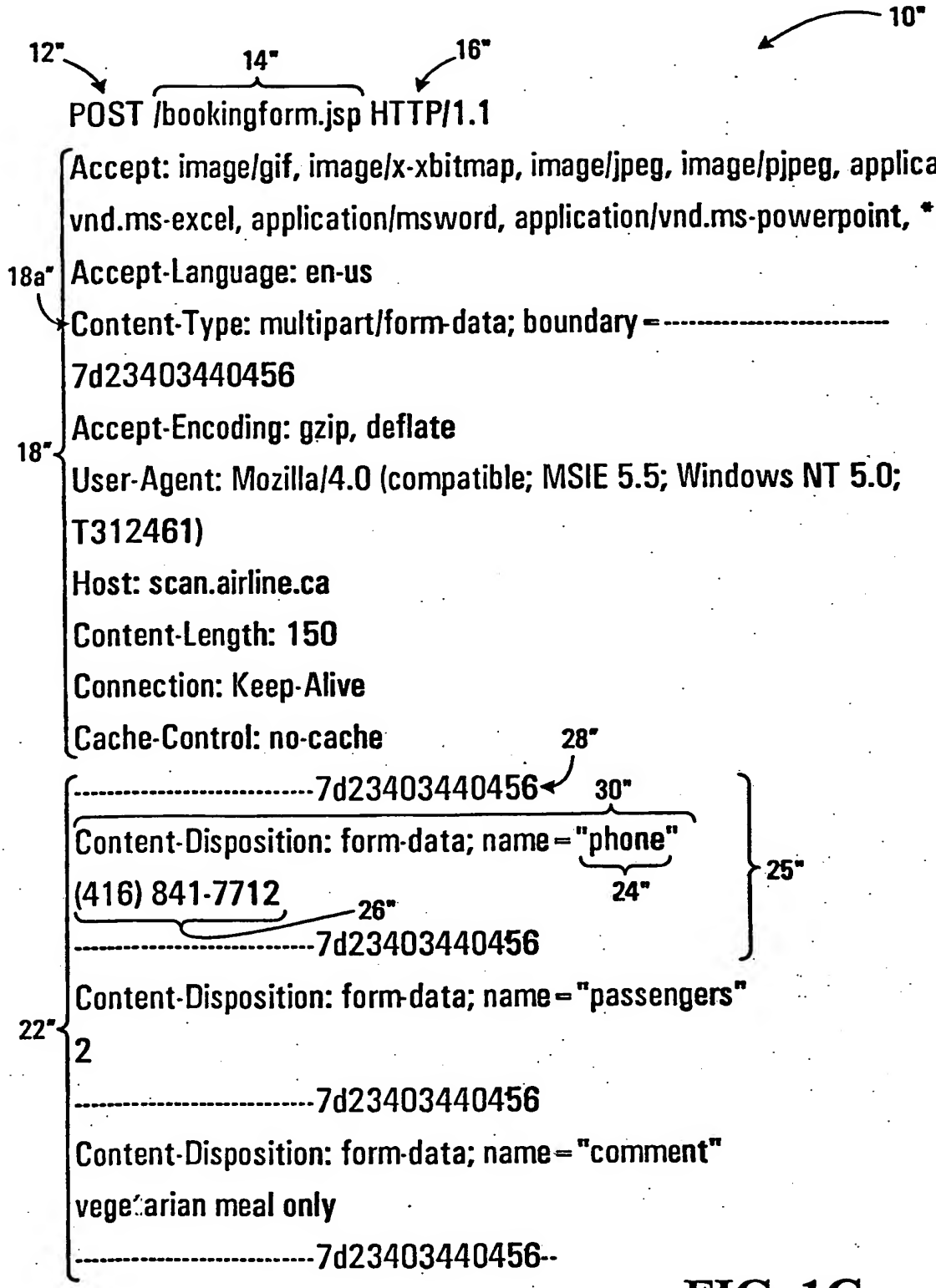
10"
12"
14"
16"
POST /bookingform.jsp HTTP/1.1
Accept: image/gif, image/x-xbitmap, image/jpeg, image/pjpeg, application/vnd.ms-excel, application/msword, application/vnd.ms-powerpoint, */*
18a"
Accept-Language: en-us
Content-Type: multipart/form-data; boundary=----------7d23403440456
18"
Accept-Encoding: gzip, deflate
User-Agent: Mozilla/4.0 (compatible; MSIE 5.5; Windows NT 5.0; T312461)
Host: scan.airline.ca
Content-Length: 150
Connection: Keep-Alive
Cache-Control: no-cache
28"
----------7d23403440456
30"
Content-Disposition: form-data; name="phone"
24"
(416) 841-7712
26"
25"
----------7d23403440456
22"
Content-Disposition: form-data; name="passengers"
2
----------7d23403440456
Content-Disposition: form-data; name="comment"
vegetarian meal only
----------7d23403440456--

FIG. 1C

```
POST /StockQuote HTTP/1.1                                    10'''
Host: www.stockquoteserver.com
Content-Type: text/xml; charset="utf-8"
Content-Length: nnnn
SOAPAction: "Some-URI"

<SOAP-ENV:Envelope                                           22'''
 xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
 SOAP-ENV:encodingStyle="http://schemas.xmlsoap.org/soap/
encoding/"/>
  <SOAP-ENV:Header>
   <t:Transaction xmlns:t="some-URI" SOAP-
ENV:mustUnderstand="1">
      5
   </t:Transaction>
  </SOAP-ENV:Header>
  <SOAP-ENV:Body>
    <m:GetLastTradePriceDetailed xmlns:m="Some-URI">
      <Symbol>DEF</Symbol>
      <Company>DEF Corp</Company>
      <Price>34.1</Price>
    </m:GetLastTradePriceDetailed>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

18a''' 25'''

FIG. 1D

50

Rule Template for Telephone Numbers

52 if data element of field matches any of the following formats consider it contains a telephone number of that format:

54a
a. North American telephone number format:
area code of:
optional (
3 digits
closing) or – or <tab> or <space>
local no. of
3 digits
optional – or <tab> or <space>
4 digits

54b
b. international telephone number format:
country code of:
optional (
2 or 3 digits
closing) or – or <tab> or <space>
city code of:
optional (
1 to 3 digits
closing) or – or <tab> or <space>
local number of:
4 to 8 digits, optionally with one or more
interspersed – or <tab> or <space>

54c
c. toll free telephone number format
1
optional (or <tab> or <space>
800 or 855 or 866 or 877 or 888
closing) or – or <tab> or <space>
3 digits
optional – or <tab> or <space>
4 digits

FIG. 2

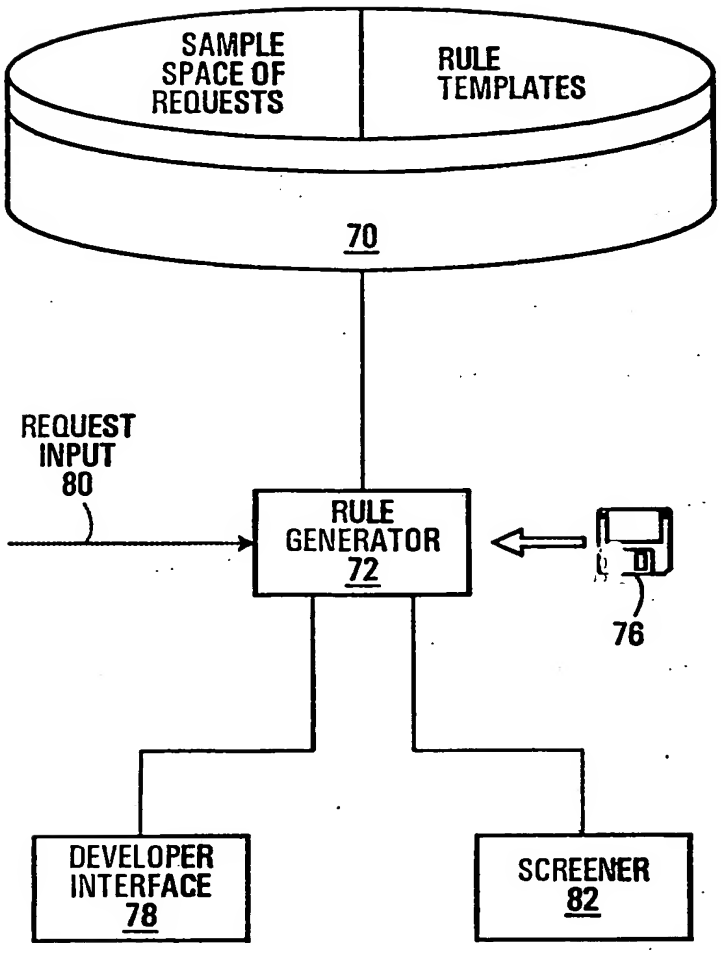
SAMPLE SPACE OF REQUESTS
RULE TEMPLATES
70
REQUEST INPUT 80
RULE GENERATOR 72
76
DEVELOPER INTERFACE 78
SCREENER 82

FIG. 3

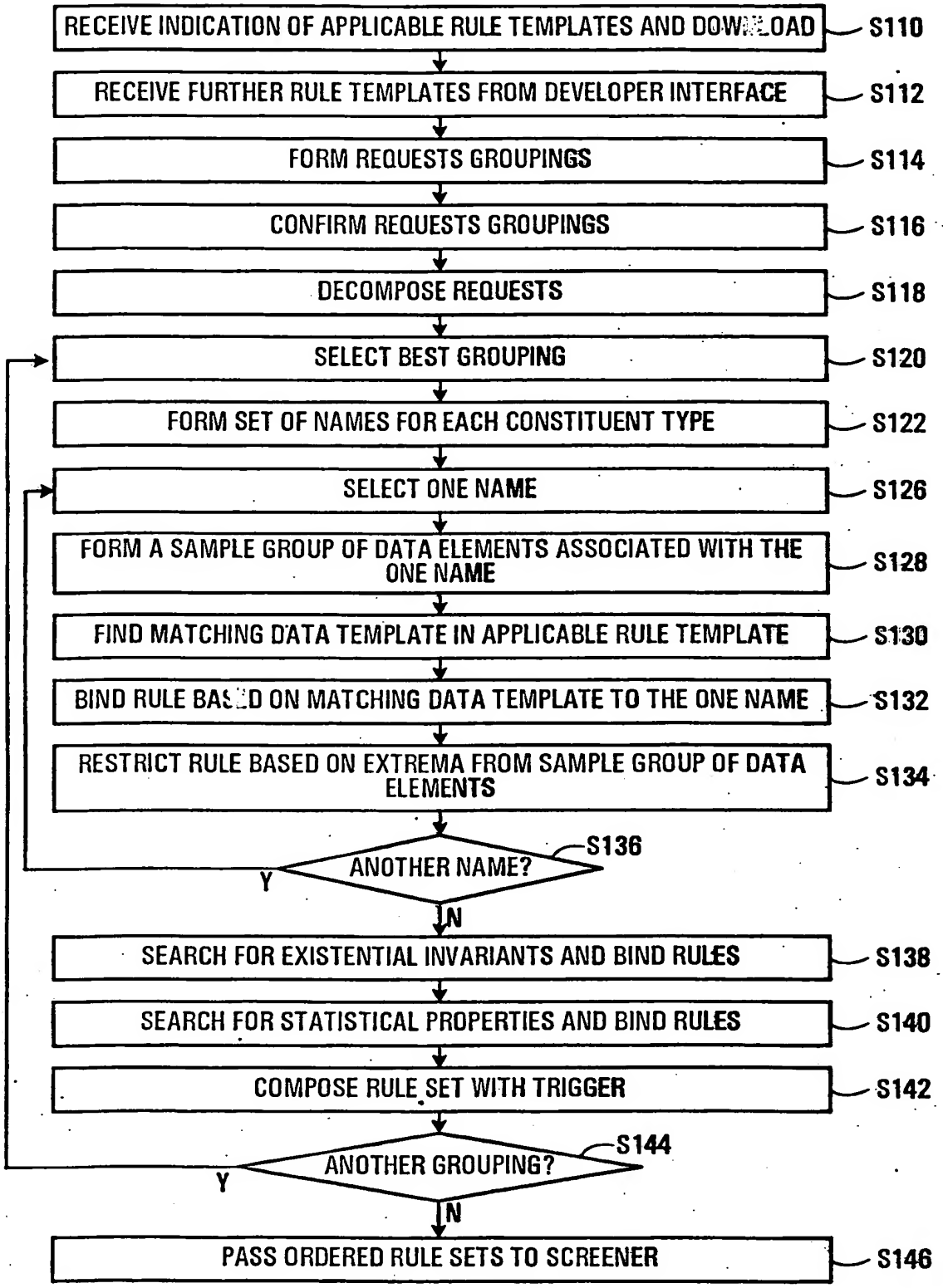
RECEIVE INDICATION OF APPLICABLE RULE TEMPLATES AND DOWNLOAD
S110
RECEIVE FURTHER RULE TEMPLATES FROM DEVELOPER INTERFACE
S112
FORM REQUESTS GROUPINGS
S114
CONFIRM REQUESTS GROUPINGS
S116
DECOMPOSE REQUESTS
S118
SELECT BEST GROUPING
S120
FORM SET OF NAMES FOR EACH CONSTITUENT TYPE
S122
SELECT ONE NAME
S126
FORM A SAMPLE GROUP OF DATA ELEMENTS ASSOCIATED WITH THE ONE NAME
S128
FIND MATCHING DATA TEMPLATE IN APPLICABLE RULE TEMPLATE
S130
BIND RULE BASED ON MATCHING DATA TEMPLATE TO THE ONE NAME
S132
RESTRICT RULE BASED ON EXTREMA FROM SAMPLE GROUP OF DATA ELEMENTS
S134
ANOTHER NAME?
S136
Y
N
SEARCH FOR EXISTENTIAL INVARIANTS AND BIND RULES
S138
SEARCH FOR STATISTICAL PROPERTIES AND BIND RULES
S140
COMPOSE RULE SET WITH TRIGGER
S142
ANOTHER GROUPING?
S144
Y
N
PASS ORDERED RULE SETS TO SCREENER
S146

FIG. 4

10/530074
Rec'd PCT/PTO 01 APR 2005

Trigger: All request for URLs containing the characters "form" 90

Conditions:

- The method must be POST
- There must exist between 1 and 100 POST fields 92
- No more than 5% of the POST fields may have blank (empty) values
- There must exist exactly one field named Comments
- The value of the Comments field must be between 20 and 2000 characters in length
- The statistical distribution of characters in the Comments field must not differ from that of standard English by more than the threshold X 92

Trigger: All request for URLs ending in the characters ".jsp" 90

Conditions:

- There must exist exactly one cookie named SessionID 92
- There may not exist any cookies not named SessionID 92
- The value of the SessionID cookie must be between 12 and 14 characters in length and must be composed exclusively of the numerals 0 through 9 and the uppercase letters A through F
- The method must be HEAD or GET

Trigger: All request for URLs beginning with the characters "/images" OR ending with the characters ".gif" or ".jpg" 90

Conditions:

- The method must be HEAD or GET
- There must not be any GET parameters
- There must not be any cookies
- There must be no more than 10 headers
- The URL must not exceed 200 characters in length

FIG. 5